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From Rules to Practices: Local Performances of a Sustainability Standard in Bahia, Brazil

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Abstract

Sustainability standards have been spreading rapidly. Yet, despite a promise of better labor and environmental conditions, actual practice change occurs inconsistently. This paper examines this inconsistency by examining how rules get translated into practice at the local level and in what ways sustainability standards contribute to more sustainable business practices. Based on six months of participant-observation and 99 interviews in the cocoa sector of Bahia, Brazil, I find that producers, themselves, must make standards work and discover how to translate transnational rules into locally suitable practices. Overcoming this challenge is contingent on two conditions. First, adopters must integrate this process of discovery with a high-performance work system that mobilizes the skills and motivation of employees for productivity and quality gains. Second, adopters' learning depends on external reinforcement, positive through support for learning or negative through a threat of sanctions. Theoretically, this dissertation contributes a practice and labor lens to private governance research and, in doing so, theorizes relationships between adopters' practices, private standard implementation, and market and regulatory contexts. Empirically, I propose that mitigating the weaknesses of private governance requires complementing transnational rules with local communities of practice in order to speed up processes of discovery and organizational change.

Keywords: Sustainability standards; labor and practice lens

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Introduction

“PROHIBITED,” announces a sign, in big red capital letters on yellow ground. “Hunting – fishing – catching birds,” it continues, followed by “Environmental Federal Law.” Rumbling along the dirt road to visit *Fazenda*¹ *Santa Margarita*,² this sign, propped up on two wooden poles, alerted me that I had arrived. And what an alert. None of the UTZ³ certified *fazendas* I had visited before in the South of Bahia, Brazil had similarly conspicuous announcements that, here, stringent environmental laws were to be taken seriously. Public inspectors may or may not arrive at this rural site in the Northeast of Brazil. But a private auditor of UTZ is going to show up annually and cross-interview workers, check records, and inspect *fazenda* installations. Lending support to the attention-grabbing sign, Gina, the administrator’s wife, recounts later that they had fired several old-time workers who had refused to release the birds from their cages, losing their job rather than their valued pets.

Two days later, I stand in the back corridor of one of the barracks along that same dirt road. Rosa, an elderly Afro-Brazilian woman with a white and red cloth wrapped around her head, had led me to the back, along soot-blackened and peeling walls, faintly reflecting the glaring sunlight that enters through the front door and some broken roof tiles. We had cast a long look over the back porch—what used to be an open-fire cooking area under a roof overhang, now strewn with scrap metal, plastic boxes, bowls and bags, wooden chairs, bunches of plantains, a handmade broom, and a non-functioning stove. The barracks have no running water or bathrooms, in contrast to the newly constructed elementary school next door featuring modern sanitary installations. When I ask her how she transports water from a barely enclosed water hole from

¹ *Fazenda* is the Brazilian word used in Bahia for cocoa plantations (ranging from typically 20 to 200 hectares). I use this term instead of plantation to keep it situated in the history of Bahia.

² Names of specific sites and individuals have been altered to protect them.

³ UTZ (formerly UTZ Certified) is a sustainability standard common in the cocoa sector.

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across the dirt road, she motions to two whitish herbicide plastic containers, with faded writing, propped up along the side wall. To take a bath, in that same water hole, she waits until after dark to have some privacy, she says, with a chuckle. Edinilson, her husband, almost 60 years old and a newcomer to this *fazenda*, later tells me that he is on a “probationary period” of three months, without a contract (and therefore illegal). This time will not count for his pension and social welfare benefits. Nonetheless, he and other workers praise the owner of this *fazenda* as a “10” (the Brazilian equivalent of an A+) because he always pays on time and the correct amount. And the housing? They shrug.

At sites, such as this one, aspirations of private and public regulation for the wellbeing of workers and the environment come crashing in with tangled local realities. With public law enforcement looming, a functioning apparatus of private audits, and adopters who may be well-intentioned and trying to comply, why do non-compliances persist? A literature on governance, increasingly cognizant of the complexities and tensions inherent in private governance, public regulation, and their interactions, mostly expects variation in how private standards are implemented (Bartley 2011; Eberlein et al. 2014). One source for such variation could lie in the adopters themselves. Accordingly, some scholars in the governance literature turn the lens on individual and organizational motivations and capabilities to comply (Hofmann, Theyel, and Wood 2012; Silbey 2013; Yan, van der Heijden, and van Rooij 2015). While these are important factors, they may not capture instances, however, where people do not abide by the rules, although they are, in principle, prepared to comply.

The data for exploring how private standards play out on the ground come from six months of fieldwork in Bahia, Brazil. During this time I conducted participant-observation with UTZ certified *fazendas* and with Cargill and Mars—both actively involved with UTZ—as well as 99

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interviews with producers and other stakeholders. In my findings, I argue that existing literature has underestimated the difficulty of turning rules into practices. I illustrate that, despite an overall low threat from public law enforcement, producers still adopt UTZ because they hope to leverage it into better practices. Yet seemingly simple rules get implemented unevenly in local sites, ranging from incomplete attempts to compliant adaptations that find ingenious ways to make rules more effective.

Behind such different enactments lies a mechanism of learning that is required to bridge a ‘rule-to-practice-gap’ since most rules require multiple steps to articulate them in action. When faced with obstacles in this process, many adopters find themselves stumped, and either muddle through or delay and cover up. Yet others adapt and continuously update their practices. Next, I isolate the conditions that seem to explain the difference—(1) the integration with a high-performance management system, and (2) perceptions of external reinforcement. A high-performance work system refers to a set of human resource and management practices that seek to increase productivity and quality through employee involvement, skill development, and incentives and integrates such practices with the wider organizational strategy (Appelbaum et al. 2000). Perceptions of external reinforcement vary across sites because the subjects of regulation differ in how much they perceive themselves to be targets of latent law enforcement. Together these two conditions favor a process of discovery and learning at better prepared and managed sites. Thus, a private standard tends to reinforce prior paths, since by itself, it does not provide a “toolkit” (Swidler 1986) for adopters on *how* to change.

The paper is structured in five parts: I first review how the literature understands the role of adopters for standard implementation. Next, I provide background on governance in the cocoa sector of Bahia. After describing the setting and methods, I present findings on how adopters

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handle a gap between rules and practices and on the conditions for effective standard implementation. In the discussion and conclusion on the implications of this research I argue that private standards should facilitate local learning and discovery processes that encourage adopters to upgrade their wider organizational and managerial system.

The Role of Adopters in Private Standard Implementation

Considering the central role of adopters for compliance and governance effectiveness, it is not surprising that private governance studies have turned their attention to the individuals and organizations that adopt private standards. Two streams of research are of note. One centers on the motivations and capabilities of adopters, with a tendency to demonstrate fraudulence or incompetence behind standard failures. Scholars have pointed out that standards may not have the desired effects because of opportunistic and symbolic implementation (Christmann and Taylor 2006; Getz and Shreck 2006; King and Lenox 2000) or because adopters are not well prepared technically (Haugh and Talwar 2010; Hofmann et al. 2012) or organizationally (Sandholtz 2012). Another stream expands the focus beyond the adopters to consider the interplay between adopters, standard rules, and standard enforcement. Researchers have argued that rules might be too specific to suit local contexts such that implementing them does not achieve the intended goals (Wijen 2014), or that failures may due to a lack of fit between standards and adopters (Simpson, Power, and Klassen 2012). Shortcomings in standard implementation can also arise due to lax, ceremonial or biased auditing (Boiral 2012; Dogui, Boiral, and Heras-Saizarbitoria 2014; O'Rourke 2003).

Less attention has been paid by governance scholars to adopters' practices, although governance scholars have called for and undertaken some research on how standards take place in practice (Bartley 2010; Schneiberg and Bartley 2008; Vogel 2008). Missing is also a labor lens, provided

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by industrial relations research, that can assess how attempts to improve labor and environmental conditions through private standards fits with the work and managerial system in place (Tapia, Ibsen, and Kochan 2015). Yet in the realm of private governance, this body of work and organization research has been largely ignored. A practice lens could be applied fruitfully to governance studies because it focuses on “how” practices develop (Parmigiani and Howard-Grenville 2011), through what organizational mechanisms they vary as they diffuse (Ansari, Fiss, and Zajac 2010), and how new ideas might take hold in practices through a process of habitualization where, to translate ideas into practices, adopters go through a process of micro-theorizing, encouraging “trying it”, and collective meaning-making (Reay et al. 2013). A labor lens helps to understand how improved practices fit with the wider work system and what the likely implications on organizational performance are.

In regulation studies more broadly, Silbey, Kellogg and others have forged a path to bring organization theory to bear on regulatory questions (Gray and Silbey 2014; Kellogg 2011; Silbey 2013). But a related question in private governance of how—in developing country agriculture, in a context of limited innovation—rules get translated to practices, what tools adopters have at their disposal to change the way things get done, and how private standard implementation relates to the organization’s labor regime has rarely been studied. Some exceptional studies have either highlighted processes of collective learning among small farmers (Perez-Aleman 2011) or the managerial innovations that ensued after standard adoption in a Brazilian cooperative of dozens of sugar mills (Coslovsky 2013). In contrast, this study focuses on how rules turn into practices in the context of autonomous and disconnected agricultural enterprises. Next I chronicle the economic rise and fall of such enterprises in the cocoa sector in Bahia.

Governance and Cocoa in Bahia

History of Cocoa in Bahia

Cocoa in Bahia has a long and turbulent history where the crop turned from an engine of wealth for a few to being at the center of a profound and ongoing crisis. The “cocoa region” is concentrated in the South of Bahia, in a “micro-region” around the provincial cities of Ilhéus and Itabuna. By current estimates, there are about 200,000 people directly involved with cultivating cocoa in Bahia, consisting of about 32,000 cocoa producers (Instituto Arapyaú 2013) and a labor force of about 170,000 rural workers. In 2014, the region produced 160,000 MT—less than half of what it used to harvest in the 1980s, before the outbreak of a pest in 1989. This accounts for two thirds of Brazil’s entire production of 218,000 MT (Hartmann 2015)—about 5% of global production (ICCO 2016).

The South of Bahia, home to the Atlantic Rainforest (*Mata Atlântica*), one of the most bio-diverse habitats in the world, became widely known to offer ideal growing conditions for cocoa in the late 19th century. Production concentrated at large estates, partly built with coerced and slave labor prior to the 1880s (Walker 2009). Cocoa became the “fruit of gold” (Carvalho and Sousa 2014:11) that contributed up to 50% of Bahia’s exports and more than 60% of Bahia’s revenues (Willumsen and Dutt 1991). Wealth among large land owners was abundant because labor was cheap and exploited and because cocoa prices were high, especially at the height of production in the 1970s. While worker families labored under paternalistic regimes, land owners often sent their children away to be educated in large cities, widening a socio-economic gulf (Caldas and Perz 2013).

The turning point came in 1989 when Brazil joined the ranks of cocoa producing countries ravaged by a crop disease. A fungus, popularly known as ‘witch’s broom’—*vassoura de bruxa*—

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(*Moniliophthera pernicioso*), vigorously attacked cocoa fields,⁴ with production plunging from 360,000 metric tons in 1987 to a low of 101,000 metric tons 12 years later (Hartmann 2015). Recovery measures for the cocoa crop, which were proposed and financed through loans by CEPLAC, a government agency for cocoa, were scientifically ill-founded and back-fired, adding to a debt problem. As of 2008, 15,000 credits were in default with a total value of just under 1 billion Reais (USD 580 million)⁵ (CEPLAC/SUEBA 2009).

The pest of witch's broom precipitated major shifts in the economics of cocoa production and labor regimes. The economics altered because co-existing with witch's broom requires more intensive pest management practices, increasing operational costs by a third (CEPLAC/SUEBA 2009). Labor regimes changed in quantity and quality. Employment of cocoa workers fell dramatically, with 60 to 80% of the salaried workforce dismissed between 1988 and 1992 (Alger and Caldas 1994), forcing their exodus, often to nearby cities, and adding to major and persistent issues with poverty and violence in urban zones. Census data shows that the rural population in the cocoa region declined by a third between 1990 and 2000; about 145,000 people left (Chiapetti 2009:93). Owners transformed salaried employment into sharecropping contracts to reduce welfare contributions. For workers, sharecropping (*parceria*) is risky because of the lack of social protection, but it can be—depending on the yield—economically favorable (Gomes et al. 2013) against the benchmark of a federally set minimum wage commonly paid to workers. Despite economic turmoil, the structures of a typical *fazenda* as a hierarchical organization have remained largely in place. The owner, not usually present on site, takes major commercial and production decisions, whereas an on-site administrator oversees day-to-day operations and between 10 and up to 60 workers for a medium- to large-sized area of 60 or more hectares who

⁴ Witch's broom might have been deliberately introduced (Caldas and Perz 2013).

⁵ With currency exchange rate of March 31, 2008

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also live and work on (but sometimes commute to) a *fazenda*. Worker housing was usually constructed many decades ago. Illiteracy is common among workers. Among administrators, too, there are several, coming from humble worker families themselves, who are unable to read or write. Typically located inland, *fazendas* tend to be reachable via stretches of dirt roads, while transport within a farm is mostly done with mules. Other farming infrastructure, if intact, comprises installations for fermentation and drying (with *cochos*, wooden boxes for fermenting cocoa, and *barcaças*, cemented drying platforms that have sliding metal roofs to cover and uncover cocoa). In short, at most *fazendas*, processes have barely evolved in decades, with minimally remunerated labor and with managerial patterns firmly established.

Governance in Bahia

Against the background of a sector in crisis, Cargill has been introducing UTZ⁶ certification, starting with 18 local cocoa producers since 2012.⁷ Thus, private governance has arrived late in Brazil's cocoa sector, compared to other parts of Latin America where it started in the 1990s and 2000s. Producers can choose between two modalities. In the first one, Cargill pays for certification and audit fees and Cargill agronomists make monthly to bimonthly visits to support the implementation. In this scenario, a producer can sell cocoa as *certified* only to Cargill. In the second one, the owner pays for certification and audit fees, and Cargill does not provide accompaniment. In this case, the owner is free to sell cocoa as certified to buyers other than Cargill (for instance to Nestlé, which started its own UTZ program in the fall of 2015). In both cases, producers are free to sell their cocoa as non-certified to any buyer they wish. Cargill offers

⁶ UTZ was founded in 2002 and started to certify cocoa in 2009. The code of conduct contains 182 requirements (consolidated to 140 in a 2015 version) on administration and on agricultural, labor and environmental practices. In Bahia, besides UTZ, there is one *fazenda* certified to Rainforest Alliance and about a dozen that are certified to the Organic standard. Fairtrade is not present.

⁷ By April 2016, this initiative has expanded to 50 producers.

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a premium of USD 150 per metric ton, amounting to about 5% over the market price, although it also requires slightly improved quality parameters from UTZ producers, offsetting the real cost of certified cocoa to Cargill. Audits are done yearly by a third-party consulting company, accompanied by staff from Cargill. Mars Brazil, a client of Cargill, also plays a role: Mars certified its local research farm and collaborates with Cargill, by co-organizing events and encouraging local producers to join UTZ. Mars also directly manages a project that provides extension services to producers.⁸

UTZ, like private standards generally, cannot undercut public regulation where Brazil stands out from other cocoa-producing countries for its demanding legislation. For the purposes of this paper, I focus on its labor legislation. To comply with labor laws, agricultural producers have to formally hire agricultural workers, pay the minimum wage of 724 Reais per month (about USD 250 in 2015), and pay their social welfare contributions accordingly or alternatively offer them a sharecropping contract (*parceria*) where proceeds from cocoa are split. Any other work arrangements, including temporary ones, are illegal. Furthermore, legal norm *NR 31* details additional requirements for rural workers' labor and safety conditions, specifying for example infrastructure provisions, such as access to bathrooms, as well as an obligation to use protective equipment when handling agrochemicals. These norms apply to the entire rural labor force, irrespective of the work regime. Institutionally, the Ministry of Labor and Employment (*Ministério do Trabalho e Emprego, MTE*), through its regional offices, is responsible for monitoring the adherence to labor norms. A key constraint is, however, that sharecroppers

⁸ In this project, Mars manages experimental plots on the properties of 11 fazenda owners from Barro Preto, the municipality that surrounds the Mars research facility. On these 11 properties, Mars agricultural workers undertake all the practices, with the goal of demonstrating that significant productivity increases can be achieved. This project has as one of its key components the adjustment of shade in the forest canopy to increase sun exposure for a higher productivity of cocoa trees.

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(*parceiro* or *meeiro*) do not appear on the employment records of MTE, rendering a large share of the current rural workforce in cocoa relatively invisible. Furthermore, the level of informality in agricultural work is 70% on average and up to 85% in the Northeast of Brazil (Pires 2008:208).

Additionally, the cocoa sector has a dedicated agency for research, extension and training services—CEPLAC (*Comissão Executiva do Plano da Lavoura Cacaueira*). Founded in 1957 to address a financing crisis, CEPLAC's role reflected the cyclicity of the sector since its financing initially came from a tax on cocoa production (now it is federally funded). With significantly reduced funding, the organization has not hired new staff in three decades (Zugaib 2013). Consequently, CEPLAC's importance for providing extension services to producers is limited. In a way then, UTZ provides an alternative form of guidance, through its code of conduct, which could be much needed for cocoa producers who struggle economically but should comply with stringent public regulation.

Methods and Setting

The site for studying private standard implementation is Bahia, which is the size of continental France with a population of 14 million people. Located in the Northeast of Brazil, it ranks low on the Human Development Index within Brazil (22nd of 27 states). Brazil differs from other cocoa-producing countries in that cocoa is commonly produced on plantations (*fazendas*), and less so by smallholders. Since standards originated with small producers, studies on plantations are still rare (for exceptions see Besky 2008; Brown 2013; Kim, Bansal, and Haugh 2015; Makita 2012; Reynolds 2014). This site thus allows us to expand our understanding of private standards on plantations, in the shadow of a potentially strong state.

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The methods adopted for this research are, first, in-depth and repeat interviews with *fazenda* owners and other key actors, and second, participant-observation of interactions between Cargill, Mars, and participating UTZ-certified *fazendas*, as well as on three select *fazendas*.⁹ Overall, I spent six months on participant-observation, from October 2014 through March 2015, followed by a two-week visit in March 2017, and conducted a total of 99 interviews in the cocoa sector in Bahia, Brazil, studying the case of UTZ certification introduced by Cargill in loose collaboration with Mars. I chose qualitative methods because my main goal was to better understand “how” questions on mechanisms (Eisenhardt 1989; George and Bennett 2005; Gerring 2004; Piore 2006; Yin 2009), which are not yet well understood in the literature on private governance. Furthermore, I knew from an exploratory field visit that the owners of participating certified *fazendas* had been carefully chosen based on their reputation and eagerness to actively collaborate. Selection bias would have seriously hampered a quantitative approach.

The interviews with producers explored various potential mechanisms, such as through the government, buyers, peers, and UTZ certification. To start interviews, I encouraged producers to tell me how they approached a major challenge on their *fazenda* to get a sense of what the salient challenges are and how they were handled. I then asked producers about the history of the *fazenda*, their perception of government regulation and the role of the government more broadly, their relationship to buyers and any changes, their network with peers, the rationales for joining certification and their satisfaction or difficulties with that as well as their family background and professional training. To build trust and to probe deeply, I opted to interview all producers who

⁹ Initial access was facilitated by the Chief Scientist of Mars who introduced me to the Director of the Bahian Mars research center (MCCS). Following a first field visit in June 2014, Cargill and Mars agreed to participate in the research project. Fieldwork started in October 2014 after the signing of non-disclosure agreements of MIT with Cargill and Mars respectively. I had full access to people, meetings, and materials, with the exception of UTZ audit reports. However, I learned about audit procedures and typical non-compliances through my participant-observation and interviews.

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directly work with Cargill and Mars twice—a group of almost 30 owners of mostly medium-and large-sized *fazendas*. In my second round of interviews with producers, I routinely asked whether they would allow access to their *fazendas* for several days and, with one exception, they all agreed to this. In addition to this group, I interviewed several non-certified producers, including producers of fine-flavor cocoa, agricultural entrepreneurs, and settler-farmers (*assentados*) who had received a small plot of land as part of an agrarian reform. In the follow-up visit in March 2017, I interviewed the local managers, called administrators, of *fazendas* I knew from before, to delve into the process of translating rules into practices. Most producers, except two, and all administrators allowed me to record interviews, which I conducted face-to-face and in Portuguese, without an interpreter. Furthermore I conducted interviews with managers of several local NGOs and government agencies, executives responsible for sustainability initiatives at Cargill, Nestlé, and Barry Callebaut, and with industry experts, and academics.

In my participant-observation with Cargill, I accompanied the two agronomists who are responsible for directly interacting with producers on matters related to certification. This included visits to *fazendas* scattered in the South of Bahia where we typically met with the local administrator or another staff member. Owners are not usually present at *fazendas*. The most active ones visit once or twice per week while others may come as little as once a year or less. Activities on site included going over paperwork for UTZ and remedying non-compliances. These included the hanging of signs, providing a box for complaints and suggestions, cleaning up or documenting the clean-up of trash or chemicals, gathering proof that labor issues had been corrected, including the payment of owed wages and the signing of contracts, and following up on water quality tests, as well as discussing matters of adolescents working on the farm. I also joined Cargill staff on visits to cooperatives as well as large agri-businesses, intended to interest

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them in adopting UTZ. With Mars, I assisted in several reunions with their staff, government agencies and producers participating in the *Barro Preto* project. Finally, I participated in a three-day long workshop, named the “Second Sustainability Workshop”, that gathered producers collaborating with Mars and Cargill, corporate staff from commercial operations and corporate affairs, UTZ staff, and other guests, for example from local universities and from the government agency CEPLAC specialized on cocoa. This workshop included talks, technology demonstrations, and a three-hour long tour of the Cargill cocoa processing facility in Ilhéus. For my immersion on *fazendas*, I selected three sites where I spent 3.5 to 4 days each to observe certification in practice. I deliberately chose participant-observation over interviews with workers because I wanted to minimize any potential risks to them. The sites were chosen for their relative representativeness of different types of *fazendas*. A first one struggled to maintain certification at the time of research. A second one was chosen for having an active but indebted and therefore resource-constrained owner. A third one represented a better resource-endowed endeavor. While on site, I explained that I wanted to understand how different activities were conducted, careful to not prime concerns with certification beyond what people already knew to be the topic of my research. Upon arrival, I walked or drove around the *fazenda* with a local administrator to get to know the site. During mornings, I accompanied workers as an additional helper, during which I pruned new shoots of branches off trees with a machete, sprayed herbicide from a hand-powered pump that was supplied with a water-agrochemical mix from a 20-liter canister on my back, and threw fertilizer at trees, roughly measured with a margarine plastic box—a full box for adult trees and half a box for seedlings and young trees. In addition, I observed the breaking of cocoa pods, the cutting of stems for new seedlings, specialized pruning to form tree covers, and weeding.

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When with workers, I asked how they had gotten to the farm, about common practices on the farm, and about their reasons for being satisfied or dissatisfied with working conditions. In the afternoons, I visited with spouses and children to learn more about housing conditions, education, and health. I asked if I could see the houses, especially bathrooms, and I inquired what they resorted to if their house was not equipped with running water or a functioning bathroom. I also took note of other visual clues relevant to standard implementation, especially regarding protective clothing, installations for washing protective clothing, storage of agrochemicals, bird cages, or the use of herbicide containers for water transport. I stayed overnight, either sharing a family bedroom at the administrator's house, or sleeping in a vacant building, or a guest room in the *fazenda's* main building. In two cases, the owners advised me to bring my own food, some of it pre-cooked, because they didn't trust that, otherwise, the local supply would be sufficient or of good enough quality.

The dataset resulting from my fieldwork includes over 680 pages of descriptive fieldnotes, besides analytical memos and blog posts, 129 hours of recorded interviews, over 1,000 pictures and some videos taken during fieldwork. In addition, I gathered documents from press, academics, NGOs, corporations, government officials, and analysts. The analysis of the data began with a repeated reading of fieldnotes and interview transcripts, where I coded documents in Atlas.ti with a focus on producers' rationales for joining UTZ, public-private governance interactions, and the role of buyers, while tracking other potentially supporting factors for standard implementation (such as peer networks) and staying open to emergent themes. In a second round of analysis, I honed in on the participant-observation period on the three *fazendas*, examining the variance in how key requirements of the standards were implemented and what rationales were given to me for why certain practices were done a certain way. This suggested to

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me that practices should be the unit of analysis. Reviewing the data through a practice lens and iterating with existing literature on standard implementation helped me to make sense of interview data where owners had described their perceptions of implementing UTZ and how this differed from their expectations. This illustrated that, contrary to the literature, motivation or capability alone could not explain why producers varied in their implementation paths but that the adopters often seemed to struggle in translating rules into practices. Thus, a practice lens emerged from the data inductively. In presenting my findings below, I first provide evidence of a rule-to-practice gap and a mechanism of local practice adaptation, and lastly present the conditions for this mechanism.

Local Performances and Transnational Rules

As the vignette at the beginning of this paper illuminates, compliance with UTZ rules on Bahian cocoa *fazendas* can be uneven and incomplete, despite active accompaniment of producers by Cargill, an influential and reputation-conscious lead buyer, a threat of public regulation, and owners who are motivated to and attempt to comply, as shown next.

Producers Adopt UTZ to Improve Practices

Besides preventing future fines from regulators, one might speculate that producers are attracted to UTZ because of the premium. However, the gross premium is about 5% of the regular market price. After deducting compliance and transportation costs (producers have to deliver certified cocoa to one of two Cargill buying points in Bahia), the monetary incentive is still positive but limited. A premium might have attracted producers' attention initially, as some acknowledged (interviews No. 8, 28, 64), but it plays a minor role for keeping them committed to the program, also because, in this region, another buyer (Nestlé) often matches the price paid for UTZ cocoa:

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I'm not here for the premium with UTZ. Because if it was for the premium I would work with Nestlé. I want that in the end my *fazenda* changes. – (Interview No. 3)

Instead, as expressed above, a major motive for producers to adopt certification is a desire to professionalize and to improve farm procedures.¹⁰ This is particularly important since many owners do not dedicate full attention to running their cocoa *fazenda*. They pursue other professional activities, live at a distance, or come to the *fazenda* for short visits only to go over pending issues together with the administrator. UTZ then becomes a consulting service, providing guidance on what changes to make, as this owner describes it:

The certification is a consulting for us so that we can make these changes more effectively... We, as owners, would not be able to make these changes. Because the people who work with certification know more about legislation, and they know better how to work with the workers. That is our perspective. That the certifier can achieve this better than we could. – (Interview No. 2)

Not all producers need UTZ as a consulting service or educational tool. Sometimes UTZ serves as a commitment device to realize pre-existing goals, as this producer admits:

We work in a family business. It is not only mine. I had a dream to control the trash in this *fazenda*. It was a thing that made me very uncomfortable. I wanted to control it in all the *fazenda*. So, to be very honest, certification was the big argument that I used (all start laughing) to convince everyone, including my brother, my father, to enter in this work. It was a thing that although we thought it was important, it just never became a priority because there are so many priorities. – (Interview No. 3)

In this example, UTZ forces adopters to give more attention to issues that might not rise to the top of to-do lists otherwise, and producers appreciate that. They refer to UTZ as a “script” (interview No. 1), “guideline” (No. 8) and a “checklist for you to see if you are within the good practices in the sector” (No. 20). They see UTZ as a way to raise awareness, to provide expertise on infrastructure, legislation or health and safety practices, and to provide a benchmark for them

¹⁰ The desire to improve operations was voiced more frequently than other motivations, including the desire to have a direct relationship with Cargill and the reputational benefit of UTZ.

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to know how well they are doing. The extent to which UTZ teaches through its code of conduct varies with the level of knowledge of producers. For some it is news that, for example, workers are supposed to use protective equipment, as apparent in this interview:

Even to teach a lot of things that we don't know. The guy has to go with a mask. He has to put on the security equipment. - (Interview No. 38)

For others, the educational effect of UTZ rules is more limited. They might know from before what should be done. Yet actual practices were lagging behind:

And the equipment of the workers: we gave it to them. But they used it sometimes. – (Interview No. 28)

This latter statement implies that with UTZ, good practices—in this case for workers' protective equipment—should turn into routines. In other words, producers seem sufficiently motivated to comply with a private standard despite a weak threat of public law enforcement. But is that true across producers? Does UTZ succeed in helping producers to achieve their aspiration of improving their practices? Next I turn to variation observed in rule implementation.

Worker Protective Clothing: Local Performances of a Health and Safety Rule

The scenes observed during stays on *fazendas* suggest that sometimes practices improve, but often not. In examining practices, I take the use of protective clothing as a primary example, which I chose because it is crucial for workers' health and wellbeing. In this section, I present how three different *fazendas* tried to address the respective UTZ rule on this issue, with varying degrees of success. The relevant UTZ rule on protective clothing, called *Equipamento de Proteção Individual* (hereafter EPI) states:

All members of a group/ workers who apply dangerous agrochemicals must put on appropriate protective clothing and equipment. - (UTZ Code Rule 9.D.1 Version 12/2009)

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In observing instantiations of this rule on three *fazendas*, differences are apparent in whether the use is established as a routine, what kind of equipment and infrastructure exists, and what kind of processes are in place. The observations ranged from an aesthetic and exceptional performance at *Fazenda A* for the purpose of showing to an outside observer that things are done properly, to incomplete attempts at *Fazenda B* with evidence for actual use of EPIs but also for slippage and gaps in awareness and compliance, to an effective and routine performance at *Fazenda C* with a system of procedures that serves the goal of protecting workers as well as improving economic outcomes (see Table 1).

Table 1: Local performances of UTZ rule on protective equipment

	<i>Fazenda A</i>	<i>Fazenda B</i>	<i>Fazenda C</i>
Owner background	Professional in non-agriculture activity	Agronomist	Professional in non-agriculture activity
Frequency owner visits	Sporadic	Weekly	Biweekly
Cocoa area (ha)	240	180	350
EPI use			
Protective equipment	Existing	Existing	Existing
EPI in use	No (not used before)	Uneven	Yes
Official training in use of EPIs	Not from this <i>fazenda</i>	Yes, about 4 workers	Yes, workers and supervisor
Spraying equipment	20-liter canisters; manual pump	20-liter canisters; manual pump	5-liter canisters; battery-powered pump
Spraying team processes	Spraying Fetching water	Spraying Fetching water	Spraying Protecting seedlings
Shower and washing infrastructure	Incomplete (no shower)	Existing but in need of repair	Existing
Responsibility for washing EPI	Workers	Workers	Dedicated person
Dogs accompany spraying workers	Yes	No	No
Type of performance	Aesthetic, exceptional	Incomplete attempts	Effective, routine
Reasons given for (non)-compliance	1) Technician who was assigned to implement UTZ left	1) Only applying ant poison	1) UTZ helped to build awareness

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	2) Paperwork (incl. on EPIs) and investment as a burden	2) Difficulty to keep up with UTZ and legal requirements due to worker turnover	2) Legally required medical exams of workers as incentive to enforce UTZ rule
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Fazenda A's aesthetic performance of using EPIs was easily recognizable as such. The protective clothes, acquired nine months earlier according to the administrator, were sparkling white, with folding creases intact. Two hours later, in the cocoa fields, these same clothes were splashed with mud and chemicals. Workers commented on how “*ah, today will be different*” and exclaimed “*oh, it's so hot, what heat!*” when going to work with EPIs. In the afternoon, when asking a worker why he thought they didn't use the equipment more routinely, he shrugged. He didn't know, he said, but he didn't think it was because of cost because the equipment is not very expensive (fieldnotes, March 5, 2015). The administrator himself, in his assessment of UTZ later that day, expressed his dissatisfaction particularly with the demands for additional work (including paperwork on the use of EPIs) and cost (for the renovation of bathrooms). One constraint is that this administrator barely knows how to write.

In the field, the goal for each worker was to empty 10 canisters of a 20 liter tank with a manual pump to spray the agrochemical mix on weeds. For a four-person spraying gang, the *tropeiro*, the person responsible for driving the mules, therefore had to bring in 800 liters—eight hikes from the cocoa forest to a river with 100 liter tanks tied to a mule each time. Habitually, as is common on farms in the region, dogs accompanied the workers and ran through herbicide-sprayed areas. Later they would return with the workers to their houses and families.

Spraying herbicides on weeds is common across *fazendas* because it is faster than weeding manually and thus saves on labor costs. Yet this practice can undermine these savings by killing cocoa seedlings—young small plants that get easily sprayed on. I learned this by error: in spraying alongside the workers, I moved along as best as I could. When stumbling through the

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weeds and maneuvering the manual pump to distribute the agrochemical spray, I overlooked an equally high cocoa seedling tree and accidentally sprayed herbicide on it. Embarrassed, I stopped another worker to ask him what I should do to remedy that situation. He came over, ripped all leaves off the seedling tree, and tried to reassure me that the seedling would survive. Would an experienced worker commit such a mishap? Producers' experiences suggest so: the failure rate of seedling trees can be high for a number of reasons, including herbicides.

Fazenda B's performance seemed, at first sight, more dependable. Clearly used EPIs, with ripped pants, hung on a drying line in a wooden barn. A newly constructed shed includes a shower for workers to wash off agrochemicals and houses an air-vented space to store agrochemicals and spraying equipment safely. But these first impressions were pierced quickly. On the first afternoon of my visit, a long-time worker (not reported by others to have participated in trainings on agrochemicals) wandered off into the farming area in his T-Shirt and shorts with a spraying pump on his back. When I later asked the administrator, he, unfazed, stated, "*he applied ant poison*"—which, agronomists confirmed, is as dangerous as other agrochemicals (fieldnotes, March 17, 2015). Also, the shower head in the bathroom dedicated to washing off agrochemicals was broken, unbeknownst to the administrator. On the positive side, several workers had participated in a government-run training on application of herbicides and on use of EPIs 11 months before my visit, and a dedicated team of two regular sprayers had participated in it. *Fazenda B* staff were also aware of a legal requirement that workers have to undergo a medical exam at the entrance and exit. As requirements go up, *fazenda* staff has become aware of the issue of turnover:

One of the big bottlenecks is that people change and that there is constant turnover on the farm. So [we] train someone and two months later they leave. - (Fieldnotes, March 19, 2015)

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In their assessment then, uneven adherence to the rule of using protective equipment at *Fazenda B* could be due to workers' turnover. However, meeting notes from monthly reunions with workers at this *fazenda* tell a different story on gaps in local oversight: they contain three separate entries on the need to purchase EPIs and to discuss their use.

Fazenda C stood apart in using EPIs in several ways. First, workers who I observed were wearing most of the equipment (although some pieces were still missing). Furthermore, there, the herbicide worker gang had distributed roles and used different spraying equipment: One person in a three-person group covered seedlings with plastic bags to protect them from spraying while the other two operated more sophisticated pumps on their bags that function with 5 instead of 20 liters and that do not require manual pumping. These produce a very fine spray that is more evenly applied on the ground.¹¹ Thus the application of agrochemicals is less harmful to the environment, is easier for the worker, and requires significantly less water that needs to be transported from sources, like rivers, again reducing labor effort. Finally, local supervisors have taken on the responsibility of reminding workers, should they slip on handling agrochemicals adequately, aware of legally required yearly medical exams for workers.

These three local performances of one UTZ rule indicate that *fazendas* differ in how they apply rules, with significant implications for workers' health and ease, productivity, and the environment. They are representative of variation in this practice at other sites. Some interviewees related different ways to encourage safe labor practices, for example by sharing the UTZ premium with workers and tying that to EPI use (interview No. 66). However, more

¹¹ The cost of these spraying pumps (called *microplex* or *geno*) is 550 Reais compared to 250 Reais for traditional 20-liter manual pumps (called *costal*). While this is considerably more expensive, it is a relatively limited expense (about two thirds of one month of minimum wage), especially when compared to the cost of agrochemical inputs, estimated at 1,000 Reais per hectare per year, which—applied to the *fazendas* mentioned here—amounts to 180,000 to 350,000 Reais.

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producers spoke of difficulties with this rule, often blaming workers for not understanding or resisting this requirement.

The three performances also illustrate that rules do not contain a “program” or “script” for how to put them into practice. For all but the simplest rules, several steps are required to make them happen on the ground. For the case of EPI use, these steps include sending workers and/or supervisors to official trainings (offered by SENAR, a government training agency), forming awareness on the dangers of agrochemicals, creating new routines, tasks and responsibilities for applying agrochemicals and washing EPIs, acquiring and maintaining materials as well as infrastructure, devising internal supervision mechanisms, and documenting the provision of EPIs to workers and their use. The example of EPIs is typical for exhibiting variation in how rules are performed across sites. Other rules, likewise, manifest in uneven practices.

This section has established that having motivated and capable adopters is insufficient. Although these owners of Bahian cocoa agribusinesses adopt UTZ with the intention of professionalizing their operations and belong to a highly educated elite, many of them still struggle to implement the standard as foreseen. Next I turn to what lies underneath this variation and what conditions seem to shape the translation of rules to practices.

The Process of Turning Rules into Practices

Why do these *fazendas* manifest UTZ rules differently? The answer seems to be because learning and implementation processes are enacted differently across these sites where some replicate existing practices while others invent new variations. A metaphor is given by a *fazenda* owner who likened UTZ to a ready-made piece of clothing that is adjusted. Although UTZ “*forces people to do certain practices,*” he says:

You adjust—the piece [of clothing] is the same but you adjust it to your body.
- (Interview No. 1)

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How people learn and adjust matters. Owners may start out with similar aspirations of improving practices, expecting win-wins between better labor practices and economic payoffs, through higher productivity or savings. Above I showed how *fazenda* owners are fundamentally interested in improved economic outcomes, through certification and other investments. This expectation held true for the owners of *Fazenda* A, B, and C. Yet they pursue these goals with different strategies. Specifically, they differ in how widely they enroll others in trying out new practices, as required by the UTZ standard, in how vigorously they reinforce this experimentation process, and how closely they integrate their experimentation, observation, and sense-making processes. In short, the practices constituting their learning process differ. *Fazendas* are hierarchical organizations where, at many sites, top-down management reigns, without involving employees. Yet few private rules can be implemented by owners alone and instead require ongoing collaboration from administrators and workers. To implement rules therefore requires that owners enroll employees in behavioral changes, as this owner recognizes:

For certification to really have an effect, the big improvement from certification would be in a change of behaviors, which means that you don't prepare the fazenda for the auditor's visit. And yes, that you do all these processes as part of the day to day operations. But for that you have to change all the behaviors, of the entrepreneur and even of the workers... It is continuous work because behavior is the most difficult thing to change. Because you are talking of a culture, of ways that are deep-rooted, that have been done for a long time. - (Interview No. 81)

Attempting to engage all in changing day-to-day operations also provides an opportunity to inquire with workers on how to accomplish certain practices efficiently. For example, at *Fazenda C*—one of the more advanced ones in implementing UTZ—supervisors explained how they wanted to convince workers to use measuring cups when applying fertilizers (the use of fertilizer is regulated in the UTZ code, although not the way of applying it). But supervisors gave up on

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the idea when workers replied that this step would slow them down and that handfuls of the grainy fertilizer would approximate the same amount.

However, many owners barely interact with employees beyond their administrator and outsource the responsibility for implementing private rules to a single person, typically the administrator or another aide. For instance, owner of *Fazenda A*—with the least satisfying compliance record among the three *fazendas* described above—hired a young technician to whom he delegated the implementation of UTZ. When this person left after a few months, the process of implementing UTZ stopped abruptly.

[I am] still [motivated], but today a little less. I stay with one foot behind because I don't have the management model. Without a technician I cannot do it. My administrator is very bad in this respect. – (Interview No. 21)

Tellingly, employees at several *fazendas* referred to UTZ as the “Cargill initiative” and greeted the Cargill agronomist as the person who would take care of relevant tasks to be done during his monthly or bi-monthly 1-2 hour visit. A predictable result of lacking enrollment across hierarchies is that employees re-enact existing practices.

Given the crucial role of experience and experimentation for learning, new practices need to be continuously reinforced, reminding all to try them out. Owner of *Fazenda C* describes such an ongoing and concerted effort:

[Implementing certification norms depends] on me. On my leaders... [gives example of EPI washing and agrochemical storage]... For that to be followed, it depends on us, the administration, are we supervising? There is no other way. You have to be on top, right? Be on top in the field: are they applying the herbicide? Are they using the equipment? Are they operating the electric scissor? Are they using the [protective] glove, to not have an accident? So I do a “field day,” once a month. I gather all the machine operators, including to ask them that they look after the equipment, to check the equipment, right? Are they using it properly? We improved a lot in this, we improved a lot. – (Interview No. 67)

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A part of this ongoing reinforcement is to educate employees, with the goal of developing a more intrinsic motivation to follow rules, as the same owner explains:

For you to maintain your storage place orderly, in the form how the certification asks you to, in the form in which it is correct – that the people learn, it has to be this way... It is as if you had to take people to the classroom, again, to make them understand. That this should not only be this way because I am asking you for it to be this way. - (Interview No. 67)

Yet at many sites this kind of reinforcement suffers from two shortcomings. First, based on examples given in interviews, owners at many sites seem to dedicate most energy to a relatively simple and easily observable requirement—to pick up the trash. Second, breakdowns in this process of encouragement and experience-based learning occur when not all prerequisites for following a given rule are in place. The example of *Fazenda B*, where meeting minutes suggested that protective clothing was missing, likely signaled to employees that safe handling of agrochemicals was not a high priority.

Ensuring experimentation does not guarantee that correct inferences are made. To draw the right conclusions from what new practices are effective for the organization, a link needs to be established between conducting particular variants of practices, observing the outcomes, and making sense of the link between practice and outcome. *Fazenda C* had established this kind of loop for taking away lessons on what works by documenting practices, tracking yields and costs for plots within the *Fazenda*, and by regularly convening employees to exchange observations. This carefully monitored learning process constitutes, however, an exception for management practices in the south of Bahia where, as a staff member of a large agribusiness quipped, most enterprise calculations are done on the back of a paper napkin.

What factors shape why, on certain *fazendas*, owners, administrators and workers embark on a successful learning path or why they keep enacting ineffective or outright harmful practices?

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Two conditions emerge as contributing to these different paths: the integration with a high-performance work system and perceptions of external reinforcement.

Conditions for Effective Standard Implementation

Integration with High-Performance Work System

For identifying this condition, I draw on a comparison of *Fazenda C*, introduced above, and *Fazenda D*—a fazenda that I did not include in participant-observations but where I interviewed several staff. Both are large agribusinesses that are owned by new investors—non-traditional owners who pursue the project of turning their agricultural enterprises into profitable companies. Both count with professional support from agronomists and external consultants but they differ in their human resource practices and their managerial system.

At *Fazenda C*, workers are incentivized to be more productive through the opportunity of earning a bonus for accomplishing more than the targeted goal. Workers have internal job opportunities for more demanding positions. Such opportunities arise in the form of supervisor and machine operator positions. At this *fazenda*, workers can be and have been promoted to supervisors from within. In addition, the owner's quest to reduce labor costs has led them to experiment with mechanized tools. Yet only workers who have proven themselves as conscientious are promoted to handling such tools. Besides monetary incentives and job opportunities, the owner considers decent housing conditions and a friendly and consensus-oriented working environment as a way to increase employees' motivation. In sum, at *Fazenda C*, they have created a bundle of skill-, opportunity-, and motivation-enhancing human resource practices that fit into the strategy of increasing productivity significantly.

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At *Fazenda D*, the ambition of increasing productivity is the same. However, there, managers struggle to elicit engagement and effort from workers despite a payment above the required minimum wage, as one of the professionals explains:

Today we suffer a disadvantage because we are working in this way; that we pay a differential [above the minimum wage that is unrelated to performance] but our productivity is low because the worker doesn't take that as an incentive to work more. - (Interview No. 8)

Given unusually high benefits, for the regional context, worker turnover at this *Fazenda D* is low, at less than 10% of workers per year for a physically demanding activity. But in trying to understand what motivates workers, the management chose not to directly engage with workers but instead opted for a top-down approach of hiring a consultant to interview them and investigate their motivations that way:

Now we have a consultant coming to research the motivations of our workers. He may find out that a worker who is working in some area might like to work in another area... maybe some workers would like to go to school at night. Beginning with this consultant, we will know. - (Interview No. 8)

The result of this employee survey revealed that almost two thirds of the workers were asking for the opportunity to either exercise another professional activity on the side or to return to school, suggesting that workers perceived limited opportunities to progress within the *Fazenda*.

A lack of advanced human resource practices is not the only issue that afflicts the managerial system at this place. Lacking complementary managerial systems to accompany the implementation of UTZ, preparing for the second audit necessitated ad-hoc improvisations to fill in gaps, as a staff member remembers:

In the first audit, [we] didn't work with fertilizer or with agrochemicals... So, we didn't have the register of forms. We didn't have a number of things. We didn't have the procedures. So we started running – do this, do that. We did what was possible in the time we had. At the time of the audit, I already knew that we were not done. - (Interview No. 8)

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To summarize, the two *fazendas*, although comparable in size and strategic orientation, possess different labor and management regimes where *Fazenda C*'s efforts to implement a private standard can draw on complementary human resource practices while *Fazenda D*'s endeavor to introduce UTZ has been conducted in a more top-down and ad-hoc fashion so far, with little evidence for ongoing learning and experimentation processes around how to embed standard requirements into the organization's ongoing operations and routines. Besides this internal condition, a second one concerns external pressures and incentives to change practices.

Perceptions of External Reinforcement

External reinforcement for adapting *fazenda*-level practices comes from three sources in Bahia: (1) importantly from the state, (2) from private governance, and (3) from prevalent local norms and conventions.

Interviews with labor and environmental regulators confirmed that they do not enforce laws in the cocoa sector. Nevertheless, the state still looms in the background by threatening future actions. Yet this threat is not perceived equally among producers. Three groups emerge—a first one of large *and* visible producers, a second one of large and medium but less exposed producers, and a third one of small producers. Only the first group perceives a “shadow of the state” and expects law enforcement to arrive within a few years. Producers in this first category stand out by their size, reputation, and economic strength. This applies in particular to *fazendas* that are owned and run by companies rather than individual producers. They see themselves to be targeted first, as this manager explains:

For a while the sense was that everyone was broke and so why would the *Ministério Público* even bother? The *Ministério Público* agenda is to make you comply with the law. There is no way, if you are totally broke. There is no point in suing you or fining you. I think that is changing. It might be changing because there is some examples, like us. So we are visible. And we are targets.

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Let's see first if these guys who can afford it are actually complying with the law. - (Interview No. 7)

This sentiment of expecting law enforcement in the future, in the next three to ten years, is echoed by others with a similar profile of heading large-scale and well-known cocoa *fazendas*. With cocoa areas of 300 hectares or above, they are in the upper echelons of cocoa producers. Although producers in this group do not expect inspectors to show up immediately because of the ongoing economic crisis in the sector, and for them, UTZ is an efficient way to come into compliance by creating awareness on legal norms. Consider a law on the health and safety of rural workers, *Norma NR 31*, which the Brazilian government has put in place as of 2005, providing precise instructions on over 50 small-print pages, for example on worker medical exams, protective clothing, housing, sanitation, and farm infrastructure. Still, top producers may learn about the specifics only through UTZ. However, once the state has been rendered visible, it can become a resource for changing specific practices where staff can make the enforcement of certain practices more legitimate, as evidenced from the following exchange with an administrator from *Fazenda C*:

I ask who is enforcing that they use the equipment, the EPI. And Rodrigo says it's him or them, the supervisors. Don't you feel like letting it go, I ask? Yes, sometimes it does, but then on the other hand you have this risk that, if there is some issue with the worker in the yearly exam, then it's very bad for the *fazenda*. So you have to. - (Fieldnotes, March 10, 2015)

Thus, the state can spur some action for specific practices, despite a lack of active enforcement, especially when intertwined with private governance.

A second group of owners, of medium- and large size *fazendas* (with cocoa areas up to about 250 hectares), also perceives this link between the likelihood of inspections and the sector's performance, as this owner laid it out with a more cynical tone:

In Brazil, they create difficulties to sell facilities. If they cannot get anything from it, then let's leave it alone. If they come they will have to close *fazendas*

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and it will be a social chaos. But be sure that the day that things are going well an inspector will knock on your door and check if things are done right. That is the cruel reality. - (Interview No. 20)

However, producers in this second group do not consider themselves on the frontlines of enforcement, although similar to the first group in being, by and large, economically stable. Just how limited the circle of producers is who anticipate law enforcement becomes clear when looking at those among the medium- and large-sized producers who stand out because they received awards and thus have been in the limelight. One of them, his *fazenda* within one hour of driving from the regional office of the Ministry of Labor, replied the following to my question of whether he ever had any inspections:

No, I never have. For them to go there, it's very difficult. (Wife: They don't have a car). Look, even the road. Go there now, to see how it is. It won't be easy to pass... And look that this *fazenda* is relatively close to the city. Just imagine the *fazendas* that are further inside. – (Interview No. 51)

In other words, the mere fact of owning a medium- or large-sized *fazenda*—the case of *Fazenda A* and *B* above—does not imply that a producer deems it likely to be inspected. Yet the argument of future law enforcement is often brought forward to convince owners of the value of UTZ—a notion that few truly believe and that this owner rejects assertively:

And however much they say that *one day* the law will arrive. I will tell you one thing, here in Bahia, and I as a Bahian – they will never go there to inspect anything. I have been here for 12, 13 years. I was never inspected for labor. – (Interview No. 23)

Hence, only a subset among large producers identify themselves to be likely targets of future inspections. In contrast, a third group—those with small properties—see themselves to be flying under the radar. Tellingly, when a Cargill agronomist visited a cooperative of small producers to explore the option of UTZ with them, he advocated that it would prepare producers for law enforcement. The reply from the cooperative leader was swift and clear:

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But the small producer does not worry [about law enforcement]. – (Fieldnotes, October 16, 2014)

Other interviews with small producers confirmed their view that law enforcement would not reach them any time soon.

In sum, external reinforcement from the state is not an objective factor out there but is mediated through producers' perceptions. At a time when actual enforcement is inactive, producers gauge how soon public inspectors might arrive, based on their *fazenda's* characteristics and location as well as on a producer's reading of the political and economic context. Those who perceive themselves as more exposed have an incentive to put more zeal into preparing themselves for future enforcement.

Reinforcement can also come from private governance, UTZ in this case, more independently. In some cases, it is invoked to create a chain of accountability, from UTZ and Cargill to the owner and then to administrators and workers. One owner describes how he makes the point to staff:

Many times we have brought [the workers] to the meeting room to show them what we have to abide by: this and that, I don't want to happen because I have a contract here that does not allow me to act that way. So I have to respect this, and I agreed that with Cargill, through the certification, you understand? And I run the risk of losing [this contract]. We do that a lot. And [my supervisor] does it a lot, with my consent. – (Interview No. 67)

In this case, the owner and his staff draw on UTZ to legitimize changes. However, UTZ does not automatically reinforce new behaviors through its audit procedure or the complementary visits from Cargill. Again, reinforcement is filtered through *fazenda*-level processes that determine what is actively asked for. In many instances, trash is an issue that is most front and center, evident in meeting minutes, in owners' accounts, and in trash cans as visible artifacts. Therefore, when workers and families in particular hear UTZ, they tend to associate it with better trash management, as the wife of an administrator put it:

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UTZ? I don't even know what it is. But that matter of trash improved a lot. Now the kids have been told that they cannot throw the trash around. – (Fieldnotes, March 18, 2015)

Finally, local norms are another source of reinforcement, for better or worse, shaping behavior on *fazendas*. Given the low bar for what is deemed acceptable behavior in the agricultural sector of Bahia, these norms may lend support for bad practices—and not limited to the cocoa sector. For example, in the vicinity of a large multinational-owned rubber plantation, local agricultural professionals referred to health problems of workers there, commonly associated with the handling of agrochemicals (fieldnotes, January 30, 2015). Revealingly, the workers on *Fazenda A* and *B*—which do not stand out for consistent compliance with UTZ or for decent sanitary conditions—consistently expressed their satisfaction because they were paid the minimum wage, on time, because there was “*no abuse*” and because the workload was lighter than what they had experienced at other *fazendas*. Still, at the three sites of observation, it was clear, from speaking with workers and some owners, that informal (thus illegal) hiring without contracts is part of the acceptable repertoire—so pervasive in the region that violations of the law are openly talked about or are tacitly accepted, mostly to reduce cost and paperwork for owners and sometimes to accommodate workers who want to claim unemployment insurance while working.

To conclude, how UTZ rules are translated to and lived in daily behaviors is influenced by how the people involved in running *fazendas* perceive to what extent their environment reinforces such behaviors. Pressures from the state and from UTZ tend to encourage better practices, although owners' perceptions of urgency mediate these sources of external reinforcement. Local conventions tend to work in the opposite direction and make unlawful or objectionable practices seem normal. The implications are twofold. On the one hand, adopters' compliance is closely related to and shaped by the context in which they move. On the other hand, this context is not deterministic because internal dynamics of *fazendas* are at least as, if not more important.

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Alternative Explanations

Two alternative explanations could be disparities in resource endowments and in external advice.

First, resource endowments likely play some role for the quality of housing where, at better endowed *fazendas*, progress in fixing infrastructure can be made more quickly. But again, this does not suffice as the major factor since well-endowed *fazendas* deviate from each other. For example, as Table 14 in the prior section showed, both *fazendas A* and *C* are run by professionals. They rely on non-agricultural sources of income and invest in their *fazenda*. Yet their agricultural enterprises differ significantly in how advanced they are in the level of UTZ implementation as well as in the state of housing.

Second, external advice could come, for example, from Cargill and UTZ or from public extension agents and hired specialists. However, fieldwork observations speak against them being a major source of variation. Cargill staff mostly provide oversight to prepare for and follow up on audits. They rarely recommend specific actions and, if so, on infrastructure adjustments and not on labor and agronomic practices. Likewise, UTZ audits are an unlikely source of learning since they are focused on compliance but not on the kinds of inventive adaptations of rules observed at the most advanced *Fazenda C*. Public extension services, through CEPLAC, are limited due to the agency's reduced staff. In the few cases, where CEPLAC extensionists are active in the field, their work is research oriented (for example on genetic varieties) and does not extend to implementing certification. Evidence comes from a *fazenda* owner with an experimental plot of CEPLAC who struggles to put UTZ into action.

Finally, hired specialists, such as agronomists, may be better able to provide guidance on UTZ. However, most of them seem to focus on high-level agronomic advice, for example on fertilization quantities or on what lots to prioritize for a given task, rather than to comment on the nuances of how to conduct certain activities.

Discussion

A private governance literature has established that how private standards play out in practice is highly context-specific, building on empirical evidence (Locke 2013; Toffel, Short, and Ouellet 2015; Vandergeest, Ponte, and Bush 2015) and on theoretical ground (Djelic and Sahlin-Andersson 2006; Eberlein et al. 2014). Less well understood is what shapes these paths.

Research that foregrounds adopters' characteristics has honed in on the role of capabilities and motivation, treating variation as a mostly technical challenge that can be fixed with building competencies (Hofmann et al. 2012) and better oversight (Potoski and Prakash 2009). This perspective struggles, however, to explain why motivated and capable adopters fail to translate private standards into actual practices. To gain a more complete understanding of standard implementation, therefore, in my research, I inquire into the conditions and the mechanisms that enable standards to have the desired effects.

In this paper I have focused on the experiences of UTZ certified cocoa plantations (*fazendas*) in Bahia, Brazil. Observations and interviews from six months of fieldwork demonstrated that there is considerable variation among these certified *fazendas*, although they are located in the same region, collaborate with the same buyer (Cargill) who supports the implementation of UTZ through regular visits, and although the owners of these *fazendas* are sufficiently motivated to participate despite limited monetary gains and are capable professionals, some as agronomists, some in other professional fields. The variation arises in particular for those rules that need to be instantiated through recurring behaviors and that are not done with a simple, one-time activity, such as hanging a sign for UTZ at a door or preparing a proper shed for storing agrochemicals. Yet it is those rules that tend to be most important for workers (e.g., training and recurrent health and safety measures) or for economic outcomes (e.g., agricultural practices).

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My findings indicate that the path toward better outcomes leads through a learning mechanism that comprises three practices: enrolling for new behaviors across hierarchies; encouraging and reinforcing experimentation with organizational practices; and integrating experimentation with evaluation practices. Two conditions support this mechanism: A first condition is whether an agricultural enterprise can integrate the learning of specific practices into a wider organizational system of high-performance human resource and production practices. A second condition is the perception that external pressures, from the state in particular but also the private standard, require and provide legitimacy for new behaviors. Local norms, too, form part of the external reference points but they, in contrast, might have more ambiguous effects. However, external pressures do not have an independent effect due to the punctual nature of yearly private audits and inactive law enforcement in the cocoa sector of Bahia. Instead, external reinforcement is dependent on adopters' perceptions and inclinations to mobilize these context conditions in day-to-day operations for implementing UTZ rules.

What should we expect to happen after a private standard is adopted at any single site of adoption? Table 2 provides bounded generalizations on how likely rules turn into practice based on the two conditions described above. When there is no integration with a high-performance work system, the most likely outcomes are to see *inertia* with no or very limited attempts at change or *muddling through* where adopters recognize that, for private (or public) auditors certain efforts have to be made but where implementation tends to be incomplete and more cosmetic than substantial. When there is integration with a high-performance work system, one would anticipate a more solid track record in practice adaptation, either autonomous or encouraged. An example of *autonomous adaptation*, described above as part of the rule on protective worker clothing, is to use battery-powered pulverizers—spraying equipment for

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herbicide application that is easier to operate for workers and more efficient in spreading the agrochemical. It is not required by law or private standard rules but can provide efficiency gains. An example of *encouraged adaptation* is to insist that workers consistently put on protective clothing by referencing the law or the UTZ requirement. The implication from this matrix is that the presence of a high-performance work system tends to prevail over perceptions of external reinforcement, at least in contexts where forceful and unannounced external reinforcement is not immediately impending. That said, adopters of UTZ in cocoa are aware that law enforcement might occur in the future, based on public actions in other nearby sectors, such as coffee.

Table 2: Likely outcomes of standard implementation

		Integration with a high-performance work system	
		Weak	Strong
Perceptions of external reinforcement	Strong	<i>Muddling through</i> Make attempts at change but try to get by with incomplete implementation	<i>Encouraged adaptation</i> Adapt practice, drawing on reinforcing external pressures
	Weak	<i>Inertia</i> Leave practice largely as is or give up after some attempts in fits and starts	<i>Autonomous adaptation</i> Adapt practice, according to site-specific priorities

The main contribution of this research is to add a practice and labor lens to the literature on private governance, which, I argue, results in a more accurate and complete understanding of standard implementation. Importantly, it reframes standard implementation from a mostly technical or motivational challenge to one that is also organizational and cultural. That is not to dismiss technical or motivational challenges. They are important. However, they do not capture

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so-far overlooked obstacles that lie in the organizational culture of adopters. Put differently, private governance does not contain the toolkit (Swidler 1986) for adopters to develop new tactics and strategies to transform rules into practices. As a result, applying the same set of rules to adopters who do not possess the same prior organizational practices can inadvertently widen the difference between those who can make the rules productive and effective for furthering their goals and those who encounter mounting frustrations and either choose to hide behind ritualistic appearances or to drop out and abandon the private governance project altogether (Lamont, Beljean, and Clair 2014). Recognizing this dynamic as an important aspect of standard implementation is useful theoretically to explain variation and empirically to overcome these hurdles. An important scope condition for this mechanism, however, concerns wage practices in the cocoa sector. Here external reinforcement seems better suited to ensure workers' rights. Further research could pursue the following avenues. First, longitudinal ethnographic research could deepen insights into how practices change after standard adoption, ideally with a multi-site approach to compare trends over time. Second, the research design of this study does not allow me to disentangle the conditions of high-performance work systems and external reinforcement. To do so, one could expand in-depth case studies to include top producer *fazendas* that might experience a strong threat of law enforcement but vary in their work system. Finally, to test the effects of the two conditions on the learning mechanism, one could design an experimental intervention to strengthen work systems at some sites but not at others, for example through a structured coaching program over time. Similarly, one could try to influence perceptions of external reinforcement through randomized surprise visits of private inspectors.

Conclusion

Are sustainability standards worth the effort, time, and the apparatus of long check lists, piling papers, and yearly audits? Can we trust the labels on chocolate, claiming “respect for people and planet”? The opinions of those involved most closely—producers and sector experts—do not converge. For detractors, standards, such as UTZ, are little more than marketing. For supporters, adopting a private standard is an important enticement to professionalize and to improve and monitor practices, although some say the benefits are too low. Whose side should we be on? What should we make of observations that the advances with private standards are often messy and incomplete, although possibly better than what would have been, absent the standard? Who is right when the realities of standard implementation seem to be contingent on institutional environments and organizational systems that can be changed, but not overnight? “Is something better than nothing?,” some ask (Besky 2008:171). I conclude the answer is yes, despite gaps between aspiration and reality. Something is better than nothing because in contexts like Bahia there are no easy alternatives, in the form of active public inspectors, functioning extension services, or organizing from unions or civil society.

But how to make sustainability standards better? For this, it is of utmost importance to speed up the processes of discovery and learning that are needed to turn rules into reality. This study shows a path toward a “better future,” as the UTZ slogan goes, by complementing the knowledge embedded in transnational rules with local learning processes. This could take the form of creating local forums or communities of practice to harness and share local knowledge, to do site visits to peer and more advanced *fazendas*, and to learn by observing the nuances of different practices, with a particular emphasis on developing workers’ skills. In addition, to spread high-performance work systems in the cocoa sector, it is necessary to enroll the leadership of local

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and regional cocoa associations into understanding and actively promoting such arrangements.

The goal must be to speed up the implementation process for all and particularly for those less experienced in organizational change.

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References

- Alger, Keith and Marcellus Caldas. 1994. “The Declining Cocoa Economy and the Atlantic Forest of Southern Bahia, Brazil: Conservation Attitudes of Cocoa Planters.” *Environmentalist* 14(2):107–119.
- Ansari, Shahzad M., Peer C. Fiss, and Edward J. Zajac. 2010. “Made to Fit: How Practices Vary as They Diffuse.” *Academy of Management Review* 35(1):67–92.
- Appelbaum, Eileen, Thomas Bailey, Peter B. Berg, and Arne L. Kalleberg. 2000. *Manufacturing Advantage: Why High-Performance Work Systems Pay Off*. Ithaca, NY [u.a.]: Cornell University Press.
- Bartley, Tim. 2010. “Transnational Private Regulation in Practice: The Limits of Forest and Labor Standards Certification in Indonesia.” *Business and Politics* 12(3).
- Bartley, Tim. 2011. “Transnational Governance as the Layering of Rules: Intersections of Public and Private Standards.” *Theoretical Inquiries in Law* 12(2):517–542.
- Besky, Sarah. 2008. “Can a Plantation Be Fair? Paradoxes and Possibilities in Fair Trade Darjeeling Tea Certification.” *Anthropology of Work Review* 29(1):1–9.
- Boiral, Olivier. 2012. “ISO Certificates as Organizational Degrees? Beyond the Rational Myths of the Certification Process.” *Organization Studies* 33(5–6):633–54.
- Brown, Sandy. 2013. “One Hundred Years of Labor Control: Violence, Militancy, and the Fairtrade Banana Commodity Chain in Colombia.” *Environment and Planning A* 45(11):2572–91.
- Caldas, Marcellus M. and Stephen Perz. 2013. “Agro-Terrorism? The Causes and Consequences of the Appearance of Witch’s Broom Disease in Cocoa Plantations of Southern Bahia, Brazil.” *Geoforum* 47:147–57.
- Carvalho, Philipe Murillo Santana de and Erahsto Felício Sousa, eds. 2014. *Entre O Fruto E Ouro: Escritos de História Social Do Sul Da Bahia*. 1st ed. Ilhéus - Bahia: Mondrongo.
- CEPLAC/SUEBA. 2009. *Análise Da Situação Financeira Dos Cacaucultores Da Bahia Em 2009*. Ilhéus - Bahia.
- Chiapetti, Jorge. 2009. “O Use Corporativo Do Território Brasileiro E O Processo de Formação de Um Espaço Derivado: Transformações E Permanências Na Região Cacaueira Da Bahia.” Unpublished Dissertation, Universidade Estadual Paulista - UNESP, Rio Claro - SP.
- Christmann, Petra and Glen Taylor. 2006. “Firm Self-Regulation through International Certifiable Standards: Determinants of Symbolic versus Substantive Implementation.” *Journal of International Business Studies* 37(6):863–78.
- Coslovsky, Salo. 2013. “Enforcing Food Quality and Safety Standards in Brazil: The Case of COBRACANA.” *The ANNALS of the American Academy of Political and Social Science* 649(1):122–38.

Work in Progress – Analysis Incomplete

- Djelic, Marie-Laure and Kerstin Sahlin-Andersson. 2006. *Transnational Governance: Institutional Dynamics of Regulation*. Cambridge, UK; New York: Cambridge University Press.
- Dogui, Kouakou, Olivier Boiral, and Iñaki Heras-Saizarbitoria. 2014. “Audit Fees and Auditor Independence: The Case of ISO 14001 Certification.” *International Journal of Auditing* 18(1):14–26.
- Eberlein, Burkard, Kenneth W. Abbott, Julia Black, Errol Meidinger, and Stepan Wood. 2014. “Transnational Business Governance Interactions: Conceptualization and Framework for Analysis.” *Regulation & Governance* 8(1):1–21.
- Eisenhardt, Kathleen M. 1989. “Building Theories from Case Study Research.” *The Academy of Management Review* 14(4):532–50.
- George, Alexander L. and Andrew Bennett. 2005. *Case Studies and Theory Development in the Social Sciences*. Cambridge, Mass.: MIT Press.
- Gerring, John. 2004. “What Is a Case Study and What Is It Good For?” *The American Political Science Review* 98(2):341–54.
- Getz, Christy and Aimee Shreck. 2006. “What Organic and Fair Trade Labels Do Not Tell Us: Towards a Place-Based Understanding of Certification.” *International Journal of Consumer Studies* 30(5):490–501.
- Gomes, Andréa da S., Valter Alves Nascimento, Mônica de Moura Pires, and Marc Caldas. 2013. *A (In)sustentabilidade Da Parceria Agrícola Na Cacaucultura Do Sul Da Bahia, Brasil*. Retrieved December 9, 2014 (http://actacientifica.servicioit.cl/biblioteca/gt/GT5/GT5_daSilvaGomesDufumierM.pdf).
- Gray, Garry C. and Susan S. Silbey. 2014. “Governing Inside the Organization: Interpreting Regulation and Compliance.” *American Journal of Sociology* 120(1):96–145.
- Hartmann, Thomas. 2015. “Production Cocoa Brazil. Data on File with Author.”
- Haugh, Helen M. and Alka Talwar. 2010. “How Do Corporations Embed Sustainability Across the Organization?” *Academy of Management Learning & Education* 9(3):384–96.
- Hofmann, Kay H., Gregory Theyel, and Craig H. Wood. 2012. “Identifying Firm Capabilities as Drivers of Environmental Management and Sustainability Practices – Evidence from Small and Medium-Sized Manufacturers.” *Business Strategy and the Environment* 21(8):530–545.
- ICCO. 2016. *ICCO Quarterly Bulletin of Cocoa Statistics, Cocoa Year 2015/2016*.
- Instituto Arapyaú. 2013. *Projeto de Desenvolvimento Para O Litoral Sul Da Bahia*.
- Kellogg, Katherine C. 2011. “Hot Lights and Cold Steel: Cultural and Political Toolkits for Practice Change in Surgery.” *Organization Science* 22(2):482–502.
- Kim, Anna H. S., Pratima Bansal, and Helen M. Haugh. 2015. “Tea Time: Temporal Coordination for Sustainable Development.” in *ARCS*. Chicago.
- King, Andrew A. and Michael J. Lenox. 2000. “Industry Self-Regulation without Sanctions: The Chemical Industry’s Responsible Care Program.” *Academy of Management Journal* 43(4):698–716.

Work in Progress – Analysis Incomplete

- Lamont, Michèle, Stefan Beljean, and Matthew Clair. 2014. “What Is Missing? Cultural Processes and Causal Pathways to Inequality.” *Socio-Economic Review* 12(3):573–608.
- Locke, Richard M. 2013. *The Promise and Limits of Private Power: Promoting Labor Standards in a Global Economy*. Cambridge; New York: Cambridge University Press.
- Makita, Rie. 2012. “Fair Trade Certification: The Case of Tea Plantation Workers in India.” *Development Policy Review* 30(1):87–107.
- O’Rourke, Dara. 2003. “Outsourcing Regulation: Analyzing Nongovernmental Systems of Labor Standards and Monitoring.” *Policy Studies Journal* 31(1):1–29.
- Parmigiani, Anne and Jennifer Howard-Grenville. 2011. “Routines Revisited: Exploring the Capabilities and Practice Perspectives.” *Academy of Management Annals* 5:413–53.
- Perez-Aleman, Paola. 2011. “Collective Learning in Global Diffusion: Spreading Quality Standards in a Developing Country Cluster.” *Organization Science* 22(1):173–89.
- Piore, Michael J. 2006. “Qualitative Research: Does It Fit in Economics?” *European Management Review* 3(1):17–23.
- Pires, Roberto. 2008. “Promoting Sustainable Compliance: Styles of Labour Inspection and Compliance Outcomes in Brazil.” *International Labour Review* 147(2–3):199–229.
- Potoski, Matthew and Aseem Prakash. 2009. *Voluntary Programs: A Club Theory Perspective*. Cambridge, MA: MIT Press.
- Raynolds, Laura T. 2014. “Fairtrade, Certification, and Labor: Global and Local Tensions in Improving Conditions for Agricultural Workers.” *Agriculture and Human Values* 31(3):499–511.
- Reay, Trish et al. 2013. “Transforming New Ideas into Practice: An Activity Based Perspective on the Institutionalization of Practices.” *Journal of Management Studies* 50(6):963–990.
- Sandholtz, Kurt W. 2012. “Making Standards Stick: A Theory of Coupled vs. Decoupled Compliance.” *Organization Studies* 33(5–6):655–79.
- Schneiberg, Marc and Tim Bartley. 2008. “Organizations, Regulation, and Economic Behavior: Regulatory Dynamics and Forms from the Nineteenth to Twenty-First Century.” *Annual Review of Law and Social Science* 4(1):31–61.
- Silbey, Susan S. 2013. “Organizational Challenges to Regulatory Enforcement and Compliance: A New Common Sense about Regulation.” *The Annals of the American Academy of Political and Social Science* 649(1):6–20.
- Simpson, Dayna, Damien Power, and Robert Klassen. 2012. “When One Size Does Not Fit All: A Problem of Fit Rather than Failure for Voluntary Management Standards.” *Journal of Business Ethics* 110(1):85–95.
- Swidler, Ann. 1986. “Culture in Action: Symbols and Strategies.” *American Sociological Review* 51(2):273–86.
- Tapia, Maite, Christian L. Ibsen, and Thomas A. Kochan. 2015. “Mapping the Frontier of Theory in Industrial Relations: The Contested Role of Worker Representation.” *Socio-Economic Review* 13(1):157–84.

Work in Progress – Analysis Incomplete

- Toffel, Michael W., Jodi L. Short, and Melissa Ouellet. 2015. “Codes in Context: How States, Markets, and Civil Society Shape Adherence to Global Labor Standards.” *Regulation & Governance* (early view).
- Vandergeest, Peter, Stefano Ponte, and Simon Bush. 2015. “Assembling Sustainable Territories: Space, Subjects, Objects, and Expertise in Seafood Certification.” *Environment and Planning A* 47(9):1907–25.
- Vogel, David. 2008. “Private Global Business Regulation.” *Annual Review of Political Science* 11(1):261–82.
- Walker, Timothy. 2009. “Establishing Cacao Plantation Culture in the Atlantic World: Portuguese Cacao Cultivation in Brazil and West Africa, circa 1580-1912.” Pp. 543–58 in *Chocolate: history, culture, and heritage*, edited by L. Grivetti and H.-Y. Shapiro. Hoboken, N.J.: Wiley.
- Wijen, Frank. 2014. “Means Versus Ends in Opaque Institutional Fields: Trading Off Compliance and Achievement in Sustainability Standard Adoption.” *Academy of Management Review* 39(3):302–23.
- Willumsen, Maria J. and Amitava Krishna Dutt. 1991. “Café, Cacau E Crescimento Econômico No Brasil.” *Revista de Economia Política* 3(43):49–67.
- Yan, Huiqi, Jeroen van der Heijden, and Benjamin van Rooij. 2015. “Symmetric and Asymmetric Motivations for Compliance and Violation: A Crisp Set Qualitative Comparative Analysis of Chinese Farmers.” *Regulation & Governance* (early view).
- Yin, Robert K. 2009. *Case Study Research: Design and Methods*. Los Angeles, Calif.: Sage Publications.
- Zugaib, Antonio Cesar Costa. 2013. *Relatório Planejamento 2013*. CEPLAC.